REMARKS

Claim 1 was rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,208,319 (Nishida). Claims 2-65 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nishida in view of U.S. Patent No. 5,555,360 (Kumazaki). Applicant respectfully traverses the rejections.

Examiner Interview

Applicant thanks the Examiner for the courtesy extended to the Applicant's representative in granting the July 26, 2002 telephonic interview to discuss the present application. Applicant has received a copy of the Interview Summary prepared by the Examiner.

Amendments

Claims 1-15 have been canceled. Claims 16, 30, 39, 50, and 56 have been amended and new claims 66-68 have been added as set forth above. Support for the amendments is as follows. In claim 16, support may be found, for example, in the specification, drawings, and, in particular, the preamble of claim 16 as it was originally filed, which included language regarding the character to be displayed within a region of a display having a particular number of pixels. Support for the amendment of claim 30 can be found in the specification, drawings and the preamble of claim 30, in particular, the language regarding the shape to be displayed a particular size on a display. Support for the amendment of claim 39 can be found in the specification and drawings, in particular, Fig. 4B and the corresponding text. Support for the amendment of claim 50 can be found in the specification, drawings and the preamble of claim 50 as originally filed, particularly the language regarding the computer program product for displaying a character, the character to be displayed within a region of a display having a particular number of pixels. Support for the amendment of claim 56 can be found in the specification, drawings and original language of claim 56. Support for new claims 66 and 67 can be found in the specification, page 9, lines 16-18. Support for new

claim 68 can be found in the specification and drawings, and in particular, Fig. 3 and the corresponding text.

Rejection of Claims 1-65

Claims 1-15 were canceled to expedite the application to issuance. Applicant reserves the right to pursue such claims in a continuation application.

It is believed that the rejections of claims 16-65 should be removed, because the references fail to teach or suggest such claims. For example, neither reference teaches a <u>system</u> comprising a <u>display</u> having a region that has a <u>particular number of pixels</u> with logic that renders a bit map having a <u>number of bits greater than the particular number of pixels</u> and logic that that, based on a percentage of bits that are on this respective portions of the bit map, determines luminances for corresponding pixels in a system such as that claimed in claim 16. Claim 16, as amended, states:

> 16. (Twice Amended) A <u>system</u> for displaying a character, the system comprising:
> <u>a display</u> having a region in which the character is to be displayed, the region having <u>a particular number of pixels;</u>
> logic that renders a bit map corresponding to a vector representation of the character;
> logic that causes the logic that renders to render a <u>bit map</u> having a <u>number of bits,</u> the number of bits <u>greater than the particular number of pixels,</u> wherein
> various bits in a respective portion of the bit map correspond to a pixel; and
> among the various bits that correspond to the pixel, different bits correspond to different locations on the character;
> logic that, based on a percentage of bits that are on in respective portions of the bit map, determines luminances for corresponding pixels; and
> logic that causes the character to be displayed in the region having the particular number of pixels, the pixels having the determined luminances.

Even in combination, the references fail to teach the invention as claimed in claim 16. In contrast, Nishida teaches that "the control unit 40 delivers a display signal <u>without taking the resolution of the device body 100 into consideration in any sense.</u>" See Nishida column 18, lines 27-29. Thus, Nishida fails to teach a <u>system</u> with a display having a region with a <u>particular number of pixels</u> and <u>logic in such system</u> that renders a bit map having a number of bits greater than <u>the</u>

particular number of pixels. Rather, Nishida teaches a generic display signal that is not part of a particular system having a display with a region in which a character is to be displayed, where the region has a particular number of pixels. Thus, since Nishida teaches a display signal not associated with a particular device, Nishida fails to teach a system that has both a display with a particular number of pixels and logic that renders a bit map having a number of bits greater than the number of pixels in a single system as claimed in claim 16. For example, claim 1 includes "a display having a region in which the character is to be displayed, the region having a particular number of pixels." In contrast, Nishida teaches that "the display signal (command) of the format shown in Fig. 3 does not indicate a display state with respect to a specific hardware." See Nishida at column 18, lines 15-17. A specific hardware would presumably include particular attributes such as particular number of pixels. However, Nishida teaches a display signal that does not indicate a display state with respect to a specific hardware. Thus, for this additional reason, Nishida teaches away from the approach of claim 16, which includes a diplay with a region having a particular number of pixels.

Further, one would not be motivated to modify Nishida to arrive at the invention claimed in claim 1. Nishida teaches a general purpose display signal applied commonly to various hardwares. See Nishida at column 18, lines 19-21. Thus, Nishida fails to teach, and fails to recognize the benefit of, in a system that includes a display having a region in which the character is to be displayed and the region having a particular number of pixels, logic that renders a bit map having a number of bits greater than the particular number of pixels. Accordingly, for this additional reason and the reasons discussed above, it is believed that claim 16, and claims 17-29, which depend directly or indirectly from claim 16, are patentable over the cited references.

Further, claim 16 includes logic that renders a bit map corresponding to a vector representation of the character. The Office Action stated that it would have been obvious to one of ordinary skill in the art to include vector representation of a character and graphics data to provide a

superior image quality of an output image as disclosed in the Kumazaki. In contrast to this statement in the Office Action, it is believed that Kumazaki actually teaches away from use in a combination such as that claimed in claim 16. For example, Kumazaki teaches a particular method of anti-aliasing, which is different from the method claimed in claim 16. Thus, based on the teachings of Kumazaki, in order to provide the "superior image quality of an output image" referred to in the Office Action, one would tend to apply the anti-aliasing technique of Kumazaki rather than attempting to combine the teachings of Kumazaki with Nishida to achieve anti-aliasing. Kumazaki offers a completely different approach to anti-aliasing from that in claim 16. Thus, it is believed that claim 16 is further patentable over the cited references. This reasoning also applies to claims 39, 50, 56 and their dependent claims.

Nishida fails to teach the method of claim 30 and teaches away from the approach of this claim. Claim 30 includes receiving a command to generate the shape, the shape to be displayed a particular size on a display. Claim 30 further includes, requesting a bit map rendering of the shape in which the shape has a size larger than the particular size. In contrast, as discussed above, Nishida teaches a general purpose display signal applied commonly to various hardwares. See Nishida at column 18, lines 19-21. Thus, Nishida fails to teach receiving a command to display a shape a particular size, and requesting a bit map rendering of the shape larger than the particular size. Rather, since Nishida teaches a generic display signal that is not part of a particular system, there is no teaching of receiving a command to display a shape a particular size, and then to request a bit map rendering of the shape larger than that particular size. Accordingly, removal of the rejection of claim 30 is respectfully requested. Removal of the rejection of claims 31-38 is also respectfully requested, such claims being patentable for at least the reasons as to their parent claim as well as independently patentable.

The references also fail to teach a television system such as that claimed in claim 39 including a television, logic coupled to the televsion for displaying a character, the character to be displayed within a region of the televsion having a particular number of pixels and logic that renders a bit map corresponding to a vector representation of the character with a number of bits greater than the particular number of pixels, along with logic that, based on a percentage of bits that are on in respective portions of the bit map, determines luminances for corresponding pixels. Rather, as discussed above, Nishida teaches a control unit that delivers a display signal without taking the resolution of the device body into consideration. Also as discussed above, Nishida also teaches a display signal that does not indicate a display state with respect to specific hardware. Thus, Nishida teaches away from a system such as that claimed in claim 39 which has logic coupled to a television with logic that renders a bit map corresponding to a vector representation of a character having a number of bits greater than the particular number of pixels of a region of the television. Claims 40-49 depend from claim 39 and are believed patentable for at least the reasons as to claim 39 and are additionally believed independently patentable.

For reasons similar to those discussed above with respect to claim 16, it is believed that the cited references fail to teach a computer program product such as that claimed in claim 50 or a system for displaying a character such as that claimed in claim 56. Review and approval of such claims are therefore respectfully requested.

The claims that depend from claims 50 and 56, that is, claims 51-55 and 57-65, are believed patentable for at least the reasons as to their parent claims. It is believed that such dependent claims are also independently patentable. For example, claim 57 indicates, "wherein the attribute comprises hue," and claim 58 indicates "wherein the attribute comprises saturation." The references fail to teach such aspects in a system such as claimed in claim 56 and 57. The Office Action points to Nishida, column 19, lines 1-21 in the rejection of claims 57 and 58. However, it is believed that

Nishida fails to disclose the claimed aspects of the invention in claims 57 and 58. Rather than discussing hue and/or saturation, Nishida discusses a "luminous state." See Nishida at column 19, lines 4, 5, 7 and 8, for example. Thus, even in combination, the references further fail to teach such attribute of the invention claimed in claims 57 and 58.

New Claims 66-68

New claims 66-68 have been added. Review and approval of such claims are respectfully requested. Claims 66 and 67 depend from claims 16 and 30 respectively. It is believed that these claims 66 and 67 are patentable for at least the reasons as to their parent claims and are also independently patentable.

It is believed that the cited references fails to teach the invention of claim 68. For example, the references fail to teach if a character has already been processed and is available in a cache, displaying the character, and if the character has not already been processed, determining a representation of a character in a bit map having a number of bits greater than a number of pixels in a region of the display device in which the character is to be displayed.

It is further believed that there is no motivation in the references to achieve the invention as claimed in claim 68. For example, since Nishida teaches not taking the resolution of the device body into consideration, it would not be apparent whether any characters need to be anti-aliased, since the need to anti-alias depends on the resolution of the display. Thus, one would not be motivated to display some characters if the character has not been processed and is available in a cache, but, for other characters, determine a representation of the character in a bit map having a number of bits greater than a number of pixels in a region of the display device in which the character is to be displayed.

Version with Markings to Show Changes Made

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages begin with the caption "**Version with markings to show changes made.**"

CONCLUSION

It is submitted that the present application is in form for allowance, and such action is respectfully requested.
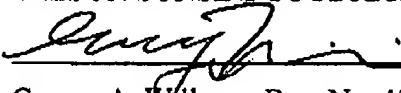
The Commissioner is authorized to charge any additional fees that may be required, including petition fees and extension of time fees, to Deposit Account No. 23-2415 (Docket No. 17201-706).

Respectfully submitted,

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Version with markings to show changes made

16. (Twice Amended) A system for displaying a character [, the character to be displayed within a region of a display having a particular number of pixels], the system comprising:

a display having a region in which the character is to be displayed, the region having a particular number of pixels;

logic that renders a bit map corresponding to a vector representation of the character;

logic that causes the logic that renders to render a bit map having a number of bits, the number of bits greater than the particular number of pixels, wherein

various bits in a respective portion of the bit map correspond to a pixel; and

among the various bits that correspond to the pixel, different bits correspond to different locations on the character;

logic that, based on a percentage of bits that are on in respective portions of the bit map, determines luminances for corresponding pixels; and

logic that causes the character to be displayed in the region having the particular number of pixels, the pixels having the determined luminances.

30. (Twice Amended) A method for displaying a shape [, the shape to be displayed a particular size on a display,] the method comprising:

receiving a command to generate the shape, the shape to be displayed a particular size on a display,

requesting a bit map rendering of the shape in which the shape has a size larger than the particular size, wherein

various portions of the bit map correspond to a pixel; and

among the various bits that correspond to the pixel, different bits correspond to different locations on the character;

based on a percentage of bits that are on in respective portions of the bit map, determining luminances for the corresponding pixels of a rendering of the shape on the display having the particular size; and

displaying the shape on the display in the particular size with the pixels the determined luminances.

39.   (Twice Amended) A television system comprising:

a television;

electronics coupled to the television for displaying images on [a] the television [display] in response to a television signal; and

logic coupled to the television for displaying a character, the character to be displayed within a region of the television [display] having a particular number of pixels, the logic comprising:

logic that renders a bit map corresponding to a vector representation of the character;

logic that causes the logic that renders to render a bit map having a number of bits, the number of bits greater than the particular number of pixels, wherein

various bits in a respective portion of the bit map correspond to a pixel; and

among the various bits that correspond to the pixel, different bits correspond to different locations on the character;

logic that, based on a percentage of bits that are on in respective portions of the bit map, determines luminances for corresponding pixels; and

logic that causes the character to be displayed in the region having the particular number of pixels, the pixels being displayed on the display in response to the determined luminances.

50.   (Twice Amended) A computer program product [for displaying a character, the character to be displayed within a region of a display having a particular number of pixels], the computer program product comprising:

a computer usable medium having computer readable program code means embodied in the medium, the computer readable program code means having:

computer readable program code means for receiving a command to display a character, the character to be displayed within a region of a display having a particular number of pixels;

computer readable program code means for rendering a bit map corresponding to a vector representation of the character;

computer readable program code means for causing the logic that renders to render a bit map having a number of bits, the number of bits greater than the particular number of pixels, wherein

various bits in a respective portion of the bit map correspond to a pixel; and

among the various bits that correspond to the pixel, different bits correspond to different locations on the character;

computer readable program code means for, based on a percentage of bits that are on in respective portions of the bit map, determining luminances for corresponding pixels; and

computer readable program code means for causing the character to be displayed in the region having the particular number of pixels, the pixels having the determined luminances.

56. (Twice Amended) A system for displaying a character [, the character to be displayed within a region of a display having a particular number of pixels], the system comprising:

a display having a region in which the character is to be displayed, the region having a particular number of pixels;

logic that renders a bit map corresponding to a vector representation of the character;

logic that causes the logic that renders to render a bit map having a number of bits, the number of bits greater than the particular number of pixels, wherein

various bits in a respective portion of the bit map correspond to a pixel; and

among the various bits that correspond to the pixel, different bits correspond to different locations on the character;

logic that, based on a percentage of bits that are on in respective portions of the bit map, determines an attribute for corresponding pixels; and

logic that causes the character to be displayed in the region having the particular number of pixels, the pixels having the determined attributes being displayed on the display [having the determined attributes].